

MACDONALD COLLEGE JOURNAL



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JUNE
1942

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EDITORIAL COMMENT

A fitting climax to the Farm Forum year has been the co-operation this month with the Wartime Prices and Trade Board to give effective publicity to the programme of price control as it affects farm people. This has been a democratic effort of the first order. With the material for discussion presented in advance in a special issue of Farm Forum Facts, the case for agriculture made by the president of the Canadian Federation of Agriculture and the subsequent discussion in listening groups on June 1st and the questions answered by the chairman of the 'Prices Board' on June 15, we have an example of two-way communication between government and people which is in the best tradition of democracy. We are sure that farm people learned much that they needed to know about the problems of a just regulation of price control. There is good evidence also, that government policies are being more directly influenced by these reactions of the people.

GARDENING IN WAR TIME

A source of strength to the British people lies in the fact that they are a nation of gardeners. Neither bombs nor bombast can shake the faith of the gardener. When affairs go wrong in Burma, or Libya, he has but to spend an hour pruning his dormant shrubs to reassure himself that periods of adversity are but the forerunner of great activity to be followed in due course by the fruits of victory.

There is no better antidote for "war jitters" than a session with the garden spade. When the nerves have been frayed by too close attention to radio news broadcasts, it is heartening to discover that there are just as many angleworms as ever in the garden soil — that buds are swelling, and seeds sprouting, just as they did in peace time — that Mother Nature loses no time in covering the earth with beauty again no matter how much devastation man may cause.

There is an obvious reason why millions of people in Britain are growing vegetables this year. Vegetables will provide a much-needed addition to the food supply. However, it is encouraging to note that even in bomb-torn Britain the important function of ornamentals in promoting national welfare is still fully recognized. British firms have distributed 1942 catalogues listing a full line of flower seeds. To a people who keep their courage high, their judgment clear and their faith strong by growing beautiful gardens, overwhelming victory and a just peace are assured.

FARM HELP

"If the present shortage of farm labour continues, there is a possibility that there will not be enough food to supply this Dominion. There is practically no available labour for farm work now, and even a supply of school-age employables is almost exhausted". So says Mr. R. Segsworth, local placement officer of the Ontario Department of Agriculture.

To help meet this situation in this province, steps are being taken by the Quebec Department of Agriculture to recruit school boys for farm work this summer, but at the time of writing complete details of the plan are not available. We would suggest, however, that anyone needing farm help advise Mr. J. H. Lavoie, Department of Agriculture, Quebec, of that fact without delay. Mr. Lavoie, who is in charge of the plan, has a good number of boys available, and is anxious to know where their services can be used to best advantage.

Farm Forums — "The People's University"

FOR many years community leaders and professional educators in Canada have held in a respect bordering on awe the achievement of the Scandinavian countries in the organizing and reviving of the life of their people. The story has been told often enough of how Bishop Grundtvig, the great Danish teacher, began a hundred years ago to lay so sound a basis for a co-operative economic society in a co-operative social spirit. There have been not a few Canadian leaders who would willingly have captured the "folk-school" spirit for various community efforts in our country — and we *have* had some successful local educational enterprises on the Danish Model. But always the feeling remained that the 'folk-school' spirit must find its appropriate Canadian form — that an imitation could never be successful in so different a setting. It waited for the recent Winnipeg conference on Farm Forums to acclaim our great radio experiment as the Canadian "People's University".

At this important gathering of provincial secretaries, radio executives, adult educationists and farm listeners — representatives from all parts of the country paid their tributes in glowing terms to the revival of interest in community and national problems that had resulted from the radio listening groups. Hope was revived and determination was reborn in many a rural dweller because of this "democratic expression of opinion" as one of them called it "that neither insults our intelligence nor overwhelms us with words we cannot understand."

Farm leaders, editors and educators saw the Forum programme as a "valuable feature in Canadian citizenship", "the most worthwhile and vital educational effort ever undertaken on behalf of the Canadian farmer" and "the best antidote to scatterbrain thinking we have in Canadian life." The Forums have encouraged people to read and to think about their own problems.

Certainly the growth of the Farm Forum movement has been phenomenal. In contrast to Great Britain where the listening group technique has been used since 1929 the Canadian Forums have had a mushroom growth in 3 years to exceed in number those in the old country. In the 1941-42 season there were 21 broadcasts on the National Network, 16 issues of Farm Forum Facts with a circulation of 250,000 copies and 1,800 groups with a membership of 20,000 people listening regularly. This was in addition to a very large audience of individual listeners. The programme has involved the co-operation of 8 universities, 8 Provincial Departments of Agriculture as well as valuable assistance from the Dominion Depart-

ment of Agriculture and many other individuals.

But this conference of Forum officers and listeners was not content merely to applaud. The programme and methods were submitted to a searching review during the three days meeting. The effective presentation of all the facts was urged. "Vigorous frankness" was approved. The consensus of opinion was that a note of pessimism in the early programmes had had a good psychological effect. Outlandish "accents" in the dramatized part of the broadcasts were criticized and defended. The importance of keeping the broadcasts themselves related to practical projects that farm people could undertake, was emphasized. "Why get all worked up about something you can't do nothing about" — one listener wrote in.

Orville Shugg — director of the C.B.C. Farm Broadcasts Department urged that the broadcasts themselves be seen in proper perspective as only a small part of a whole programme which included effective organization, provision of authentic material and training of leaders as equally important.

H. H. Hannam—president of the C.F.A. pointed out

that the democratic nature of the project was its best feature. "We must believe in the people implicitly" he said, "We must trust the people. There is no other course for democracy. We must have faith that no matter how much the meek may be bull-dozed or gypped — they will eventually inherit the earth".

Problems of finance were discussed. The National Office has been operated on a budget of \$2300 during the past season, contributed by the Canadian Association for Adult Education and the Canadian Federation of Agriculture. The C.B.C. has contributed network and station time, paid actors fees and provided script writers without charge, at an estimated cost of \$30,000. This was appreciated as a fine public service, but one which should be expected from a public corporation. Steps have been taken to insure the continuance of the programme on a sound financial basis.

There was realistic planning of next year's programme too, with recognition that concern for the contribution that farm people can make to the war must undergird the whole effort. But the planning was not short-sighted. Problems of land settlement, soil conservation and co-operative farming and health as well as of increased food production had their place.

'The Farm Forum is for the Farm Family' in all aspects of its life, — A Canadian Folk-School, — A "People's University".

An Australian Estimate

We feel that Farm Radio Forum broadcasts constitute probably one of the most important of all the contributions which broadcasting has made to adult education. We were particularly struck by the strong social character of the project — concerted action along democratic lines. We also greatly admired the skill shown in the way in which all the different persons connected with the project had succeeded in keeping the same standard or "level" throughout the series.

*T. W. Bearup, Acting General
Manager, Australian Broad-
casting Commission.*

Control of Caecal Coccidiosis

by W. A. Maw

CAECAL coccidiosis is perhaps one of the most serious parasitic diseases attacking chickens during their early growth, occurring usually at 3 to 16 weeks of age. Generally the presence of the disease is not noticed until a number of chicks are found dead in the pens, or droppings containing blood are seen on the litter or on the range. When the chicks drop dead the disease has already been present in the flock for at least one week and prompt control measures are extremely urgent.

In general, the chicks affected by the disease appear weak and listless, the eyes are closed, the feathers loose and ruffled and the skin of the face is pale, usually lacking all red colour. The internal manifestations are readily seen in the caeca and intestinal wall. When this disease is present the caeca are greatly enlarged and contain largely blood or bloodstained cheesy material.

Coccidiosis is caused by a small parasite which may be carried over from year to year in the soil or in the houses. Adult fowl may also be chronic carriers of the disease, thus infesting the soil or litter through droppings carrying the infective eggs or oocysts.

The development of the disease through the infected soil usually appears when the weather conditions are warm and humid. Thorough sanitation is, therefore, extremely important at this season of the year. The litter in the brooder houses should be changed at least every five days and, if coccidiosis is present, the houses should be cleaned daily. Burn all litter and disinfect the equipment and floors. Avoid damp areas around water founts and, if necessary, put water founts on wire mesh platforms.

Soil cultivation is also essential to general sanitation. Frequent cultivation and cropping of the growing range is a good practice. Strict sanitation appears to be one of the most effective methods of control. Various medicinal treatments have been used. Since the disease is first noted by the bloody droppings, which are an indication that the infection has already been present in the flock for a period of days, prevention of further infestation by sanitary practices is of utmost importance.

The feeding of milk to produce a "milk flush" of the intestinal tract has been used. The flushing of the intestines, however, causes excess moisture in the droppings, thus adding to the conditions conducive to the development of the infective coccidia in the droppings. At the present time milk powder is not available in quantity and it is very high in price.

(Concluded on page 10)

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AGRICULTURE

Articles on problems of the farm

Expand Production

Let's make the greatest possible use of what knowledge we have

D^{R.} C. F. HUFFMAN, Research Professor of Dairy Husbandry at Michigan State College, writing in the *Feedstuffs Journal* of May, 1942 makes a number of points which are not only timely, but also have considerable practical application to dairy farmers in Canada. For the benefit of our readers and to assist in our common aim of greater and more economic production we present here-with a part of this valuable treatise on "Dairying for Defense" in a condensed form.

Doing our job efficiently under present circumstances means developing a programme to conserve labor and utilize knowledge. Use a milking machine if the size of the herd justifies it, haul manure directly to the field, grow crops which require less labour and buy fertilizers for special crops if necessary, are fundamentals that can be applied on most farms.

A milk production builder which every farmer can adopt is proper milking methods. Every dairyman should appreciate good cow psychology. We are told that the cow is a bundle of habits and is tempermental. She may get into the habit of giving down her milk when the feed cart rattles, when the milking machine starts or when she is eating grain.

The cow should be milked as soon as possible after the letting down process occurs in order to get the most milk; and the faster she is milked the more milk she will give. It has been demonstrated that the presence of a strange dog in the barn at milking time may keep a cow from giving down her milk. The holding up of milk is not under the control of the cow but is an involuntary effect. Consequently a milk stool over her back does not do any good.

Many dairymen have trouble in drying off persistent milking cows. It has been shown that production of milk stops when a measurable pressure in the udder is reached. This fact can be made use of in drying off cows — just stop milking them. It is not necessary to reduce the feed. Watch the udder and usually you will be surprised how quickly the pressure subsides after milking is stopped. If, however, the cow has a bug in her udder which causes congestion then milk her out. This new method of drying up cows without withholding feed means that the cow will require less fitting during the dry period.

Disease Control

Preventing and controlling disease is an important part of any increased production programme. Mastitis or

inflammation of the udder is perhaps the most important disease and in about 95 per cent of the cases is due to the activity of a certain germ. The first thing to do is to find the infected cows. Unfortunately, this is not so easy, since cows may harbor and be potent spreaders of the disease without giving "gargety" milk. In order to control the disease therefore, the services of a veterinarian should be used to collect milk samples from every milking cow to determine the presence or absence of the germ. This should be repeated every 2 or 3 months. Other suggestions are:

1. Place positive cows together at one end of the barn.
2. Milk positive cows last.
3. Wash and sterilize the milking machine after each milking.
4. Milk the first 2 or 3 squirts from each teat into a pail of disinfectant.

Feeding the Milking cow during summer

The main job of the dairyman is to use as much home grown feed as possible. The most important home grown feed is roughage and of the roughages the most important crop is pasture. A good pasture programme means that the cow furnishes the labor for harvesting. A hay crop should never be harvested as hay or silage, which is needed for pasture. Many dairymen look upon pasture as a glorified exercise lot and too frequently such is the case. Land is seldom too good for pasture and as a rule pasture on good land means increased returns per acre. Certainly in these times of labor shortage the crop plan should include as many acres of permanent grass and legumes as possible.

Fresh young pasture is good for growth in heifers and milk production in cows because at this stage it is usually a very complete feed per pound of dry matter. Even timothy is rich in protein at this stage. As maturity takes place the percentage of fiber increases and because it is hardened or toughened to provide strength in the process, it is rendered less digestible. At any early stage the fiber and other constituents are highly digestible.

Pasture grass used at the proper stage of maturity should contain 15 to 20 per cent protein on the dry basis. At this young stage, the grass is loaded with many of the vitamins and other essential dietary factors.

In order to make the best use of pasture, plan to have plenty of it during the hot dry months of summer. This can be accomplished by allowing a larger acreage and perhaps

(Concluded on page 10)

REPAIR HAY LOADERS EARLY

Haying and harvesting machinery should always be put in first class condition before it is put into use for the season's work, but this year much more emphasis should be put on this statement than usual. First, we can't get new machines even though we may want them, and, secondly, we are going to be extremely short handed on farms this summer.

We have no definite information as to the exact difference between the numbers of new hayloaders available and the number desired, but it is almost certain that there will be a considerable shortage. The hay loader is an important labor saver in times like these and there will be many wanting to buy loaders who previously have always pitched their hay by hand. Even many of these people will be disappointed. Those with old loaders had better do the best possible with a repair job.

In the old-style, cylinder type loader the things which a farmer should always have on hand for quick replacement are conveyor slats, conveyor ropes and drive chain links. Occasionally the ropes should be completely renewed. Some years the loader is allowed to stand in the weather longer than it should and it doesn't take very much weathering to take the life out of thin rope. To have them break in the field is always a source of lost time. It should always be remembered that, when putting in new ropes, there must be enough slack in the ropes to prevent them becoming too tight when carrying up heavy windrows of hay. The most common cause of broken slats, we believe, is not enough slack in the ropes. The driving chains at the ends of the slats, on the other hand, must be kept tight.

Finally, see that missing bolts are replaced and that loose nuts are tightened. Use spring washers under those that won't stay tight. Clean out the oil holes and see that oil gets to where its needed and your old loader will go through haying in fine style.

L. G. HEIMPEL.

SUGGESTS FARMERS SAVE RYE FOR SEED

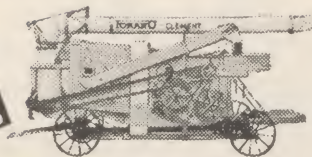
John MacLeod, Crops, Seeds and Weeds Branch, Ont. Dept. of Agriculture, Toronto, suggests Ontario farmers might well save a portion of their rye crop for seed. Mr. MacLeod recalls that there was somewhat of a seed shortage last year and that farmers were unable to purchase seed when desired.

"Rye for pasture and as a green manuring crop is becoming increasingly popular," said Mr. MacLeod. "Many potato growers sow rye in the early fall and plow it under in the spring. Growers say they have very little scab on their potato crop when rye is plowed down."

In addition to supplying early spring pasture, rye also provides an abundant amount of straw for bedding stock. It is a handy crop to have on any farm as it can be turned to so many uses in wartime agriculture.

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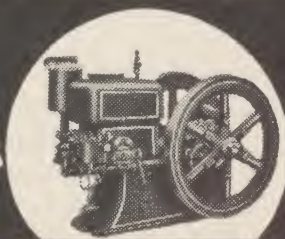
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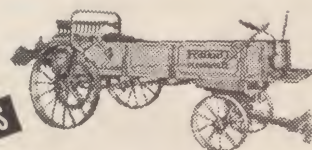
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Keeping Engines Cool in Hot Weather

by L. G. Heimpel

WARM weather operation of tractors and trucks usually brings to the surface any troubles which may be lurking in the cooling systems of these machines. The first year or two of operation of farm tractors everything usually is fine. Generally the machine does not do more than perhaps 30 or 40 days of work per year, and there is no tendency to overheating. The capacity of the cooling system is usually larger than is really necessary. The fan belt doesn't slip; the radiator has not become sufficiently coated with scale on the inside to cause trouble and not enough dirt and dead insects have been drawn into the air passages on the outside of the radiator to prevent the heat from being carried off. But, if the machine has had more than the usual amount of work; if hard water has been used in the cooling system and if much work has been done under particularly dirty conditions, the radiator may be rather badly clogged and trouble may be expected.

One of the things the operator will note perhaps is that the radiator has to be refilled more frequently than was formerly the case. This may be due to evaporation, because the water is heated to higher temperatures, or there may be a leak in the cooling system. These leaks sometimes are baffling. The hose connections may have small defects; the pump packing may leak a bit, or there may be blowhole in the cylinder head gasket, in which case the water gets away into the crank-case. Sometimes all that is necessary to stop such leaks is to tighten the cylinder head bolts. In other cases a new cylinder head gasket must be put in. When the cylinder head is removed and the upper portion of the bore of one or more cylinders shows rust on the walls, on the portion not touched by piston travel, it is an almost sure sign of internal leakage. Water that gets down past the pistons is almost certain to cause excessive sludge formation in the crankcase.

Some tractor operators are not sufficiently careful to use clean pails to put water into the radiator. It's not the bit of dirt from one refill that causes the trouble; it's the accumulation of repeated additions of bits of dirt that counts. Tractor users should always remember that it is essential first, to put only clean water in the radiator, and secondly, to use only soft water. The old rain barrel, so placed as to catch rain water from the garage roof, is a good source of soft water for use not only in tractor radiators but also those of trucks and cars.

Tractor operators who use their heads to the best advantage usually get along best with their iron horses. These men are always investigating things when working around their machine. They notice the condition of the fan belt, for instance, and tighten it before it becomes too loose. Not only does a loose belt interfere with the cooling effect of the fan, but the belt slips, gets too hot and there



go two dollars or more for a new belt. After a day's threshing in grain with lots of sow thistles or Canada thistles, the good operator washes the down out of the radiator air passages, cleaning out, at the same time, many moths and other insects which meet their end by getting too close to the radiator. A stream of water from a hose nozzle is best for this.

The good operator doesn't forget about the need of possible repair parts. When an engine is a few years old a new fan belt is likely to be needed; so are new hose connections, pump packing and some of the gaskets. These should be bought before they are actually needed.

Another cause of overheating is the use of too rich a fuel mixture; running an engine in this condition can easily make as much as five gallons difference in one day's fuel consumption. A late spark will also cause excessive fuel consumption as well as overheating. Still another cause is poor valve timing, and by this we mean merely the late opening and early closing of valves due to the failure of the operator to adjust the tappet clearance to allow for ordinary wear. This is particularly important with the exhaust valves. With too large a gap clearance between the ends of the tappets or valve push-rods and the valve stems, the valves begin to open too late; then, at the point of greatest lift of the valve it is only partially open, and it closes early. Result — the burnt gases can't be cleared out completely and the engine loses power. This calls for a wider throttle opening, excess fuel consumption and excessive heat delivered to the cooling system.

Nova Scotia Apple Marketing Board Issues Report

The report of the Nova Scotia Apple Marketing Board, lately received, makes interesting reading, even though the bulk of its pages represents tabulations of different categories of fruit marketed. The experiment of marketing all the fruit of such a large apple producing area under one agency is something that must be watched with interest by all those interested in the efficient marketing and distribution of farm products, particularly such a perishable product as apples.

The three general outlets for Nova Scotia apples were the dehydrating plants, overseas exports and Canadian and nearby island markets. In addition, the Board, for the first time, interested itself directly in the disposal of warehouse culls and was successful in clearing throughout the season the full quantity available at controlled prices.

Quantities of apples in terms of barrels purchased and distributed in these classifications were as follows:

Processing	464,638 bbls.
Overseas	101,465 "
Canada, etc.	303,936 "
Culls	243,182 "

The following quotation from the report contains food for thought for those interested in the subject:

"Local market operations this year were featured by the introduction of methods which, although not new in the field of fruit merchandizing, were somewhat in the nature of an experiment for Nova Scotia.

"These innovations were (a): practically all apples prepared for the fresh fruit market were packed under one common, Board inspected, N.S. brand and (b): with minor exceptions, all sales were handled by the Board office.

"It can now be reported that few of the fears of those who were originally doubtful as to whether these methods should be introduced actually materialized and that, from the point of view of selling the most apples at the highest prices, the new technique proved itself, over the season, to be efficient and practical.

"External sales arrangements this season followed the lines indicated by experience to be productive of the best results. Generally speaking, sales were made throughout Canada only to Fruit and Vegetable wholesalers and distributors. In Nova Scotia this plan was supplemented by the supply, by Board trucks, of unserved commercially serviceable rural districts.

"No thoughtful person will be certain that he has the key to solving the distributional problem. It is the uncharted field of all commercial production, and admittedly particularly troublesome in farm products. What is clear is that the problem cannot be solved by pretending it doesn't exist nor by reverting to solutions that have already been proven a failure. That the Board is making at least some progress in widening the distribution of N.S. apples can be read from the sales record of the past three years."



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As manufacturers of Metal Roofing, our production, in common with all products using steel, will be subject to restrictions arising from the war. At present, however, we shall make every effort to supply Metal Roofing for new buildings to replace fire loss. As an emergency alternative, we are prepared to supply Asphalt roofing in rolls, or shingles.



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FERTILIZERS IN WAR-TIME

War-time labour problems confront both the farmer and the fertilizer manufacturer. The Dominion Government, through its Fertilizers Administrator, has taken steps to eliminate superfluous grades and to facilitate economic distribution of fertilizers. In these measures the Government is assured the wholehearted support of the Provincial Boards and fertilizer manufacturers.

In the Dominion Government policy of fertilizer subventions to farmers emphasis has been placed on Pastures which contribute more than any other crop to the production of food for Britain.

The Pasture crop is harvested by the grazing animals — an important labour-saving factor. Fertilized pastures produce two-fold during a longer grazing season, and the herbage is more palatable and nutritious. There is abundant experimental evidence in favour of fertilizing pastures in fall.



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Thinning in the Apple Orchard

by A. N. Nussey

FRUIT thinning is a recognized orchard practice in many of the fruit growing areas of Canada and the United States. With many successful growers, thinning has become as indispensable an operation as spraying, pruning and soil fertilization. Systematic thinning in the apple orchard will do as much to increase the size and quality of the fruit as any other major orchard operation.

Fruit thinning is the removal of a part of the crop in order to improve the size and quality of the remaining fruit and lessen the strain on overloaded trees. Perhaps the most important advantage resulting from thinning is an increase in size of fruit. Under favorable conditions of fruit bud formation, pollination and setting, many varieties of apples are likely to overbear in some years. Very often the result is fruit of small size and poor grade. A large apple requires from 30 to 50 leaves to nourish and develop it to maturity, therefore, with heavy yields the average number of leaves per fruit runs much short of this requirement. There is no better way to adjust the crop to the ability of the tree to support it than by thinning.

Thinning also has a favorable influence on color, which is of great importance from the standpoint of grade. In the first place many of the fruits are so placed on the tree that they color poorly and are removed in the thinning operation; thus the crop remaining will be more uniform in color. Furthermore, by removing part of the crop more sun reaches the remaining apples resulting in better coloring.

In years of a heavy crop thinning reduces breakage of the limbs. This damage is sometimes very serious and necessitates the placing of props under the limbs for support which in itself is a costly procedure. The weight of the crop as it approaches maturity produces a tremendous leverage on the branches, and the danger of injury, especially in the presence of high or sudden winds, is very great. Where the practice of thinning is carried on a better distribution of the crop is obtained which the tree is more able to carry.

A properly thinned tree has most of its defective fruits removed early in the season, hence the handling costs at harvest time are greatly reduced. A crop in which 75 per cent will go in the upper grade with only a few culls is much less expensive to handle than one that runs less than 50 per cent in the upper grade with a large proportion of culls. In almost all fruit growing sections where thinning has become a common practice, the saving in expense of handling the crop is considered to be large enough to cover the cost of thinning.

Unless overdone thinning does not decrease the total yield of fruit. Careful tests have indicated that there is little, if any, influence on total yield; some growers have claimed an increase in total yield. Thinning certainly increases the total yield of marketable fruits and the pro-

portion of such fruit that packs in the upper grades. These are two factors which are of direct concern to the grower.

Effect on the tree

Fruit thinning will not increase the vigor of the tree but it will preserve it. The most robust apple tree may become weakened by a series of heavy crops. The degree to which a tree can withstand the exhaustion due to a heavy yield of fruit, depends on the vitality of the individual tree. The usual consequences of overbearing are a decreased vegetative growth, smaller leaves and reduced fruit bud formation. Hence, thinning a heavy bearing tree would induce better fruit bud formation, increase vegetative growth and thus maintain the vitality of the tree. Thinning is relatively more necessary on mature trees making small annual growth or on trees reduced in vigor with thin surface, than on young vigorous trees of the same varieties.

When to thin

As a rule apples should be thinned as soon after the last drop as possible, which usually occurs in Quebec districts about the second or third week in June. The more promptly the work is done, the better the results, since most of the elaborated food is transferred to the fruit in the early part of the season. The last drop in June is the final natural thinning by the plant itself, and thereafter it is possible to tell how many fruit will stick and how much artificial thinning will be required. At the time when the work should be done, apples are usually about one-half to three-quarters of an inch in diameter depending upon the variety.

In general practice, not more than one apple should be left per spur and these fruits thinned 4 to 8 inches on the branches.

How to thin

Thinning may be done by hand or by the use of shears. The usual method is by hand. In this method the apple stem is grasped by the thumb and forefinger and the fruit is pushed off with the other fingers. In this way the pressure is put on the stem rather than on the spur. Care should be taken to throw the apples removed away from the tree; otherwise, if they are allowed to fall through the branches the remaining apples are liable to be bruised. Furthermore, care should be taken not to remove the stems from the spurs nor to break off the spurs from the branches.

Costs

Thinning costs depend on the spread and height of the trees, cost of labour, quality of labour, the size of the crop and other factors. In districts where thinning is a common practice the laborers become very proficient in doing the actual work and it is estimated that the average cost to thin is about 30 to 40 cents per tree. The apples must be picked at some time and thinning saves the cost of handling the culls at harvest time which should counterbalance the cost of thinning.



CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

THE MAPLE SUGAR CO-OP.

A thriving organization in the co-operative field is the Quebec Maple Sugar Producers Association which began in 1925 with 17 members and now numbers 112 local associations with over 2,200 farmers contracted to market their entire maple crop through the company.

To Cyrille Vaillancourt, the founder and present general manager goes much of the credit for this fine organization.

The first group of 17 farmers from Dorchester County began by sending their syrup to Mr. Vaillancourt's home in Levis, where it was canned in gallon containers and peddled to stores and individual customers. A second group was soon formed in Megantic County and the decision was taken to market sugar in commercial quantities. Premises were rented from the Co-operative Federée and then began the steady growth which finds the Association now with its head office in Levis, plant and equipment in Plessisville, valued at \$265,000.00 and a business which had a turnover of close to one million dollars in 1940.

Syrup is shipped to the plant from all over the Province. The product is processed by most modern and approved methods and marketed in six forms — Maple Sugar, Granulated Sugar, Maple Butter, Maple Flavor "Canada Strong" and Maple Syrup in two grades, the famous "Citadel" Brand and "Camp" Brand.

The plant in its busy season, which runs from the end of April into August, employs up to 80 people and has produced as much as 140,000 pounds of sugar in a single 24-hour day. The size of this operation can be appreciated when it is realized that to produce that much sugar involves the handling of a hundred tons of syrup, which has



Canning the famous "Citadel Syrup".

to be dumped from drums, pumped into evaporators, boiled, poured, cooled, boxed, wrapped and weighed.

In the research laboratory two chemists spend full time testing and experimenting in order to maintain the high quality of the product.

A considerable quantity of the crop each year is put up in 70 pound blocks which are sold to the tobacco trade in the United States.

For purposes of co-operative organization the province is divided into five sections: Lower St. Lawrence, Beauce, Megantic-Arthabaska, Eastern Townships and North Shore. Each section elects five directors who have responsibility in their section. An annual meeting of the 25 directors elects a board of five — one director from each section — who administer the affairs of the Association.

Shares have a value of \$30, payable \$10 a year from proceeds of the crop.

A monthly magazine, "The Bee and the Maple" is issued by Mr. Vaillancourt as the official organ jointly of the Maple Producers and the Apiculturists of the province.

The Secretary-Treasurer is M. Henri Boivin of Levis. The office manager at the plant, G. Marchant, who gave this story to the Journal, is himself an enthusiastic co-operator.

The farmer sets the national dinner table, and nothing would please him better than to see everyone eating heartily . . . But agriculture is only one part of our national economy . . . to put over a program of better national nutrition, all the parts of our economy will have to pull together.



Evaporators at the Citadel plant.

MARKET COMMENTS

One of the most influential forces on markets of farm products is the weather. The early spring and good growing weather has aided farming tremendously thus far this season. This is marked specially in the growth of grass which is such an important crop in eastern Canada. Cattle went on pasture two weeks earlier than usual in many sections. A gain of two weeks in a pasture season that is always comparatively short is always a matter of importance. This season when feeds and particularly hay were scarce and expensive it enabled a great saving to the feeder.

Among the main changes in the markets of the month was the advance in beef and veal. This has been due in part to the recently announced regulations of the War Time Prices and Trade Board in regard to beef. The new regulations allow some seasonal increase in price for winter fed cattle. The following top prices were reported in Montreal during the week ending May 21: Choice Steers \$12.00, Good Cows \$10.00, Choice Veal \$13.00 and Canners and Cutters sold up to \$6.25. The prices recorded below do not correspond with these figures as they are average prices. The average prices of all meat animals for May 1942 reflect a marked increase over the prices of the same month in the previous year.

Dairy Products

Prices of butter and cheese also show some advance over those of the previous year. The relationship between prices of butter and cheese is in a more reasonable ratio than prevailed during the past few months. The high price of cheese in relation to butter that prevailed during recent months has, as expected, promoted an increase in cheese production at the expense of butter. A scarcity of butter has been reported in some sections. Such scarcity need not

cause undue alarm when consideration is given to the large per capita consumption of dairy products in the form of butter that prevails. Further rationing of tea, coffee and sugar as recently announced should promote the use of fluid milk and thus have a pronounced influence on the dairy industry.

Trend of Prices

	May 1941	April 1942	May 1942
	(\$)	(\$)	(\$)
LIVE STOCK:			
Steers, good, per cwt.	9.00	10.20	11.35
Cows, good, per cwt.	6.80	8.00	9.00
Cows, common, per cwt.	5.20	6.00	6.75
Canners and Cutters, per cwt.	4.10	5.10	5.52
Veal, good and choice, per cwt.	9.00	12.15	12.66
Veal, common, per cwt.	6.85	—	9.87
Lambs, good, per cwt.	8.00	*8.50	*7.55
Bacon hogs, dressed B.1, per cwt.	12.25	15.33	15.40
ANIMAL PRODUCTS:			
Butter, per lb.	0.30	0.35	0.35
Cheese, per lb.	0.18	0.23	0.22
Eggs, Grade A, large, per doz.	0.22	0.30	0.30
Chickens, live, 5 lb. plus, per lb.	0.19½	0.26	0.23
Chickens, dressed, Milk fed A, per lb.	0.29	0.28	0.29
FRUITS AND VEGETABLES:			
Apples, B.C. McIntosh, per box	2.00	—	—
Apples B.C. Winesaps, per box	—	2.95	3.40
Potatoes, Que. No. 1, per 75 lb. bag	0.55	1.60	1.70
FEED:			
Bran, per ton	24.50	29.00	29.00
Oil meal, per ton	(32%) 33.00	(38%) 44.00	(38%) 44.00
* per head.			

COCCIDIOSIS . . .

(Continued from page 3)

A second treatment through feeding is recommended. Flowers of sulphur and hardwood charcoal, or bone char, added to the mash ration tends to correct the internal condition and lessen the chances of heavy infestation through continued infective droppings over a long period of time.

At the *first sign* of bloody droppings feed the following dry mash for five to seven days, after which resume the regular diet.

Starting mash	90 lbs.
Flowers of sulphur	5 lbs.
Hardwood charcoal or bone char	5 lbs.

100 lbs.

If the birds being treated are confined to houses without direct sunlight, some leg trouble may develop. It is, therefore, advisable to have direct sunlight in the pens where the sulphur treatment is being used. If later outbreaks occur repeat the treatment.

Strict sanitation must be followed at all times and especially so when an outbreak has occurred.

EXPAND . . .

(Continued from page 4)

cutting a part as hay or utilizing silage if temporary pastures have not been planned for.

The amount of milk produced on pasture is determined not only by the pasture but also by the individual cow. Usually a cow will consume 25 to 35 pounds of dry matter in the form of pasture when the supply is ample. This means that enough nutrients are available for maintenance and about 1½ lbs. butter fat daily. Good cows, therefore, cannot do their best on pasture but must be fed a supplement. The kind of supplement to use may be any one or a combination of the home grown grains such as barley, oats, wheat or corn. Grass pastures which are mature, or poor legume pastures, should be supplemented with a grain mixture furnishing about 16 per cent protein. Such mixtures are available to farmers in Canada in all districts.



DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec

Department of Agriculture

QUEBEC'S NEW SUGAR INDUSTRY

The new beet sugar plant at St. Hilaire is now beginning to take shape and, if all goes well, it should be in operation this fall. The warehouse in which the pulp will be stored is finished, and the sugar warehouse is well started. The plant will turn out about $4\frac{1}{2}$ million pounds of sugar a year when it is running at capacity, although this amount will not be made this year.

It was not certain, earlier in the season, if the plant would be finished in time to process this summer's crop, and since the farmers in the area from which the supply of sugar beets will be drawn had little experience in growing this crop, only about 1500 acres of beets have been planted. Eventually it will take 10,000 acres to grow the beets needed to keep the plant supplied.

Twelve special agronomes spent six months in Ontario last summer studying sugar beet production in that part of the country, and the work of showing farmers in the St. Hilaire district how to grow beets is under their direction. Seed for planting has been advanced to the farmers

by the Department, and the cost will be deducted from the price paid for the resulting beets when they are delivered to the factory in the fall. Seeders and cultivators, bought by the Department for this purpose, are being rented to growers wherever they are needed.

It is expected that growers will get about 10 tons of beets to the acre, and the price for beets to be paid by the factory this fall will be about \$6.50 per ton. One ton of beets will produce about 300 pounds of sugar.

This new industry is being started at a most opportune time, just when the supply of sugar available is being reduced through the action of enemy raiders. The venture is being financed by the Department of Agriculture at the outset, but the plant will eventually, after the cost of starting the business has been recovered, become a co-operative owned by and operated for the benefit of the members, who will be the farmers in the district who farm the 10,000 acres from which the plant will draw its supply of raw material.

CANADA MAY HAVE TO GROW HEMP

Hemp is a fibre which is necessary for ropes, fishermen's nets, bags for a special purpose and papermaking. For most of these uses, there are no substitutes available, and consequently the supply must be assured. All of the hemp used in this country was imported from Italy and India as long as conditions permitted. Now that these sources are cut off, it becomes evident that hemp cultivation in Canada has become a necessity, not only for the present, but also due to the fact that hemp would most likely be called upon to act as a substitute for other kinds of imported fibres which cannot be cultivated in Canada and which might fail to reach us in sufficient quantity should war cause restrictions in shipping from Africa.

A meeting to study the possibilities of hemp cultivation was held recently at the head-office of the Howard Smith Paper Mills, Ltd., in Montreal. A number of people of the Montreal district who are interested in the question attended the meeting. This crop, which at one time gave rise to a flourishing industry in Eastern Canada, has entirely disappeared in the last few years, owing mostly to restrictions enacted by the Federal Government in its efforts to stamp out the effects of a drug called Marijuana.

While it was admitted by all that the people of Canada

have to be protected from the effects of this drug, it is also a fact that by far the greatest part of the drug supply reaching the marijuana addicts is collected from plants growing wild by the roadside or in backyards, and there is little evidence that any of the drug came from fields where this crop was grown for commercial purposes in view of supplying the textile industry.

While it is too late to grow hemp this year, the meeting was unanimously of the opinion that there is no time to lose in order to iron out all the difficulties which can be foreseen at present and that the growing and processing of this crop offered no difficulty whatsoever for those who have had experience in flax growing. For these reasons, a survey already under way is being pushed to completion as fast as possible and another meeting will be held shortly at which interested parties from all parts of the country are expected to attend.

Among those present at this first meeting were several growers, consumers, and representatives from the Provincial Government and the Agricultural Dept. of the railways, as well as experts in the fields of farming and botany.

BLUESTONE KILLS MUSTARD

Mustard, as all our readers will agree, is a pest. The bright yellow of its blossoms making colourful patches against the green may delight the eye of the artist, but it arouses much different feelings in the mind of the farmer. Wherever it appears it should be got rid of; as quickly and as thoroughly as possible.

Mustard seed is particularly long-lived. Once the plant has gone to seed it is of very little use pulling it up, for the seeds have fallen on the ground and the damage is done for next season. Mustard seeds can germinate and grow after having lain in the soil for as long as forty years. The plants can be pulled while they are in bloom and before seed has set, but this method of control is hardly practical where large amounts of it are involved. The only sure way to get rid of mustard is to kill the young plants before they have had a chance to grow large.

Because of its type of growth, mustard in grain fields can be killed by spraying with a solution which will kill the weed and not damage the grain. Copper sulphate (bluestone) used at the rate of 2 ounces in a gallon of water (25 pounds in 100 gallons) is very effective. Spraying should be done *early*, when the mustard has developed four or five leaves and before the flower stalk has appeared. At this stage of the weed's life the leaves are growing in rosettes and are easily covered with the spray. The grain, which at that time is about 6 or 8 inches high, is growing upright and it leaves shed the poison without injury.

Spraying done before this will be less effective, for the small thick leaves which are produced first are very resistant and hard to kill. If spraying is delayed until blossoms have appeared the plant is too tough to be easily killed. This is the time when the spraying is often done, but the earlier treatment will be much more effective.

Spraying should be done between nine in the morning and four in the afternoon, preferably on a warm sunny day. If rain threatens, wait until the weather has cleared.



The spray will remain active for a week after application if it is not washed away by rain. One good application, made under favourable conditions, should destroy 90% of the mustard in a field — 100% control has been achieved under best conditions.

The Department has a number of power sprayers which are in operation every summer in various parts of the province. They treat some 600 or 800 acres each year, and the first year in any district the work is done by the Department as a demonstration. In following years the farmers buy the materials and do the work, under supervision of the sprayer operator who travels with the machine. On the average, it costs about \$1.50 to spray an acre, and the results are worth it.

On the Corn Borer Front

Twenty-five Departmental and 1000 municipal inspectors have been busy inspecting corn fields, seeing that the work of destroying all corn remnants has been well and truly carried out. From the first of June on, they have been engaged in re-visiting the districts inspected earlier, making sure that the provisions of the law have been complied with. Growers who neglected to do the work required will be prosecuted in the courts.

Corn borer damage, through the unrelenting work of the Department, has become less and less each year. In 1940 approximately half the crop was infested. Last year the percentage of infestation was only 20%, and the objective for 1942 is 5%. How nearly this goal will be reached depends on how well the work of destruction of corn remnants has been carried on. The rules are simple—get rid of every trace of last year's crop. Plow it under, burn it, but get rid of it. If this is done before June 1st there are no moths to fly around and lay eggs from which borers will hatch.

Fighting the corn borer is a real war effort, for corn is one of the essential crops which will produce indirectly cheese, eggs, butter and meat. Corn production can be increased by increased plantings, but also by reducing the damage caused by borers. The percentage of infestation must be reduced to 5% this year.

FLAX PROSPECTS

Present indications are that about the same amount of flax will be sown in Quebec this year as last. In those districts where crops were good last year, more flax will be grown this summer. Farmers who had poor luck are, on the whole, planting less. For the province as a whole, the total will be about the same.

Adjusting the Beef Situation

THE Wartime Prices and Trade Board has announced a comprehensive plan to ensure adequate supplies of beef for domestic consumption in Canada, and also to provide a means whereby Canadian cattle producers may receive the export price for the number of cattle which could be exported to the United States, and whereby the domestic cattle market may be supported up to levels equivalent to beef ceiling prices until each export quota has been filled.

The new plan includes a means of paying beef producers the export price for cattle which they would normally ship to the United States and provides a system for the control of exports of cattle whenever shortages in the domestic supply of beef call for action. A Food Corporation, to be operated under the Foods Administrator of the Board, will be established. The Food Corporation will, in periods of short supply, acquire beef cattle from exporters in such numbers as may be required to maintain domestic supplies of beef, and will re-sell such cattle in the domestic market at prices consistent with wholesale beef prices. To make the control effective, exporters of beef cattle will be placed under license, and licenses will be granted subject to a condition which gives the Food Corporation the right to divert to the domestic market any proposed shipment of beef cattle at a price equivalent to that which the exporter would receive in the export market. When the total number of cattle physically shipped for export, plus the cattle bought by the Foods Administration under this arrangement, equals the quarterly quota under the United States Trade Agreement, the Board will take such action as may be required to support the domestic cattle market at appropriate prices in relation to beef ceiling prices to the extent that physical shipments under the quota remain possible.

In adjusting conditions in the beef cattle industry, the Board recognized the necessity of seasonal variations in

cattle prices which would allow for the normal cost of wintering and encourage winter feeding of cattle. The new order makes provision for corresponding adjustments in wholesale and retail ceiling prices on beef, and includes a schedule establishing current maximum prices, which will be revised from time to time in accordance with seasonal requirements.

The new order sets up a system of 15 zones across Canada, and establishes uniform maximum prices for beef which packers and wholesalers may charge in each of the zones created. These maximum prices have been based on a thorough survey of wholesale price ranges for beef during the basic period, Sept. 15 to Oct. 11, 1941.

For the purpose of ceiling prices all kinds of beef have been grouped into two major classes. One class includes beef from yearlings, steers, heifers and fed calves; the other includes cow and bull beef. The newly established maximum wholesale prices apply to the highest qualities in the different classes. Prices for other qualities will be permitted to find their own levels under the defined ceilings.

The maximum prices are for Beef delivered to the Retailers place of business or to his nearest railway station.

Retail Maximum Prices—Maximum prices for retail sales of fresh beef are to be determined as follows:

Each retailer is to regulate his selling prices for the various cuts or portions of fresh beef so that the aggregate selling price of all such cuts and portions from any carcass, side, quarter or cut purchased by him from a packer or wholesaler shall be his laid-down cost, including any transportation charges, actually paid plus the mark-up of such retailer as established during the basic period for sales of fresh beef of similar cuts and quality.

It is also provided that the Board may determine any maximum mark-ups for any retailer in substitution for the mark-ups established by him.

No Fertilizer Subventions Under 500 Lbs.

Some dealers are allowing subventions on fertilizer purchases under 500 lbs. These are being refused as the regulations distinctly state: "A minimum of 500 lbs. of any kind or analysis or combination of chemicals as for home mixing." Therefore, a purchase of 250 lbs. of 2-12-6 and 250 lbs. of 4-8-10, although totalling 500 lbs., is still below the minimum and not eligible. The same applies to small amounts of any chemical purchased for straight use even though the same purchaser bought 500 lbs. or more of a recommended mixture. The subventions do not apply to fertilizers used for potatoes, gardens, etc. Dealers should allow the subventions only for the amounts and crops intended.

Watch Your Machinery

An appeal that is made to the farmers of the province is to get all possible use out of their present farm machinery. Machines should be kept in good repair so that it will not be necessary to buy new equipment as that would mean a greater demand on Canada's supply of steel. The seriousness of the steel situation is clearly set forth in "Victory Needs Steel" by C. H. Millard, executive director steel workers organizing committee. He states "Not only have plants and sections of plants been shut down because of a shortage of finished steel, but mills have stopped, or have worked only part-time through a shortage of scrap. All indications point in the direction of much greater potential expansion than has yet been achieved."

Plant Protection Society Meets

Delegates to the annual meeting of the Quebec Society for the Protection of Plants held at Macdonald College last month, agreed that the protection of crops against damage from diseases and insects is of prime importance at any time, but especially so now when production must be maintained at the highest possible level. It was emphasized that growers should be urged to take the best possible care of their spraying and dusting equipment, for replacements will be difficult if not impossible to get.

Officers for the coming year will be: President Champlain Perreault, Ste. Anne de la Pocatiere; Vice-president, C. H. Crawford, Ottawa; Secretary, Rosario Barabe, Quebec; Assistant secretary, Fernand Godbout, Montreal.

Holstein Breeders' Picnic

The annual picnic of the Holstein Breeders' Association will be held this year at the Federal Experimental Farm at l'Assomption on June 23rd. All Holstein breeders, their friends, in fact, anyone interested in dairy cattle, are most cordially invited to attend.

Co-Operation Grows in Quebec

In 1932 there were 124 co-operatives in this province with a total business of \$2,235,848.46 and net profits of \$44,276.27. In 1941 there were 418 co-ops. with a total of 32,384 members, total business of \$21,112,761.70 and net profits of \$475,047.23 available for the general reserves or for patronage dividends. The different kinds of activities carried on co-operatively is interesting, as the table below shows. Some co-ops. carry on several different activities, so the total of the table is naturally greater than the number of co-ops. in the province.

Types of Co-Operative Activity in Quebec

Butter and cheese	243
Seed production	28
Potatoes	37
Sale of eggs	50
Hatcheries	37
Livestock	128
Canning	7
Tobacco	4
Honey	1
Syrup	1
Flax	14
Fruits and vegetables	12
Buying (fertilizers, etc.)	239
Charcoal	1
Electricity	1
Baking	1
Hop growing	1
Miscellaneous	4

SAVE BUTTER FAT!

This is a slogan of which more will be heard in the near future, when the campaign for recovery of precious fat which now goes down the drains of our butter and cheese factories gets under way. As the old saying has it, "Many a mickle makes a muckle" and it may surprise many of us to know that if all the tests, samples and so on were saved — if there were no leakage from the end of the cheese press — if there were no wastage anywhere in the factory — there would be 175,000 pounds of valuable fat saved in the province every year that could be collected and used.

And that is just what is going to be done. What will be done with the fat? It will be used to make soap. Full details of the plan have not yet been worked out, but we will have more information about this for our readers soon.

Burlap is Scarce and Becoming More So

In the very near future jute, the material of which grain sacks are made, will be difficult if not impossible to obtain. Grain sacks, potato sacks, and burlap of any description will be very difficult to buy, and anyone who has any on hand will do well to take care of them.

Keep empty bags (or full ones for that matter) dry. Wet burlap rots quickly. Shake out any sacks you have and hang them up in a cool, dry place where rats and mice can't get at them. Cotton bags, tarpaulins and similar articles should be cared for in the same way, for once the present supply is gone, there is no more likely to be had.

Have We a Butter Shortage?

Elsewhere in this issue there appears a story from Nova Scotia concerning the possibility of a butter shortage in Canada. This is a problem which has the officials of the Department slightly worried. It is estimated that at the present rate, Quebec's output of cheese in 1942 will increase some 25 million pounds over last year, with a drop of butter production of some 10 million pounds.

This means that more and more butter factories are turning to the production of cheese. Admittedly, we must make the cheese we have promised to send overseas, and we are doing it. But what will become of these cheese factories when the overseas demand ceases? Many butter-making co-ops. are investing in cheese-making machinery which will be useless to them after the war. This is the problem which is worrying government officials, and which should be worrying the farmers. Farmers in "butter-making" districts should think carefully before converting their butter factories into cheese factories.

Famous Herd to be Broken Up

The Holsteins of the Mount Victoria herd, owned by the late T. B. Macaulay, will all be sold, without reservation, at an auction sale to be held on Monday, June 29th, at Hudson Heights.



LIVING AND LEARNING



A Visit to a Larger School Unit

by Dr. S. R. Laycock

College of Education, University of Saskatchewan

LATE last fall the writer had the privilege of visiting the Holden Division headquarters in the system of larger units of administration at present in operation in Alberta.

The division consists of seventy-seven school districts with a teaching staff of ninety teachers. There are no towns of any size included within the division. Holden, which is the headquarters of the unit, is a small town of three or four hundred inhabitants. The population of the division area is mixed as to racial origin. There are a large number of Canadians of Ukrainian and Scandinavian, as well as of Anglo-Saxon origin. The small towns of Holden and Bruce are included in the division.

The management of the school division is in the hands of a board of five members elected by subdivisions. Each member, therefore, represents about sixteen school districts. The board has as its executive officer an Inspector-Superintendent of Schools. This board has adopted the policy of holding its superintendent responsible for the quality of teaching in the schools. The board accepts the recommendations of the superintendent in the hiring, transferring, and dismissing of teachers without any political or personal interference on their part, and approves the appointments unless there is a very genuine reason to do otherwise.

Local boards of trustees still exist. The tendency is for them to be more active than at first. They have supervision over janitor work and community gatherings held in school property. They advise concerning repairs and teacher-placement. There is a divisional association of local trustee boards which has a yearly convention to hear a review of the work of the division and to make suggestions.

The divisional board has a repair man on the job the year round. He fits each child to a desk, repairs furniture and desks and looks after the distribution of supplies. The latter are bought at wholesale prices and such materials as notebooks, pencils, etc., are supplied pupils at cost.

The policy of the board is to paint each school every three to five years. They paint or kalsomine the interiors every second year. Another policy is to build some new schools each year out of current income. In this way the older schools are gradually being replaced.

Some Educational Results

When the writer knew Holden before the advent of the larger unit, one high school teacher taught all the high school subjects. Now there are two high school teachers for grades ten to twelve. (Grade nine is not a high school grade in Alberta). In addition, there are three itinerant teachers who teach the high school students. A specialist in Household Science spends a day in each town each week; each town has a permanent set of equipment for this subject. A special teacher of general shop work also spends a day each week in the high school. The latter is equipped for leather work, metal work, motor mechanics, carpentry and blacksmithing. There is a special music teacher for the division and she spends a day a week in the town of Holden. She also goes to rural schools.

In order to make the facilities of high school available to rural boys and girls the divisional board has organized a dormitory in the town of Holden. Last year accommodation was provided for twenty-six boys and girls. These boys and girls live in separate parts of the building and are under supervision. They assist in the work of the dormitory. Some come Monday morning and go home Friday night. Others remain over the weekend. The divisional board makes a grant of three dollars a month towards maintenance and the rest of the cost is divided on a pupil basis. Last year the cost was \$7.50 per month per pupil. The Household Science specialist plans the meals for the dormitories at Holden and Bruce at the beginning of each week. All children are medically examined. As a result of provision of dormitory accommodation there are only a couple of schools in the division where one teacher teaches all the high school work. There are three or four more schools where one teacher teaches grades seven to eleven.

This year Holden Division had the exclusive service of a Health Unit. The cost, which is \$11,000, is borne on a fifty-fifty basis by the Department of Public Health and the divisional board. The seventy-seven schools of the division, therefore, have the full-time service of a medical doctor, two public health nurses, a secretary-technician, (trained to do laboratory tests) and the half-time services of a sanitary inspector who inspects dairies, restaurants dormitories, water supply, milk supply and school toilets. The health unit is supplied with two motor cars.

In addition to the permanent library in each school the division has a system of travelling libraries. A box of forty books for free reading goes into each school (including rural schools) each month. In addition the board loans supplementary readers to students of grades seven to eleven. The students are required to pay merely for the postage.

The division maintains a teachers' reference library where the teachers may write in and borrow professional books. The teacher may ask for a professional book, and if it is deemed of general value to the reference library it is purchased.

A Visit to a New Rural School

The writer was able to visit a new rural school at Fairview, south of Bruce. The community is a mixed one. It includes Poles, Scandinavians, and Anglo-Saxons. Without question it is one of the nicest rural schools the writer

has ever seen. The exterior is covered with insul-brick and the interior contains the newest in furnaces, in toilet facilities, in blackboards, in tables and chairs and in a separate activity room as well as a play-room in the basement.

The visit to the larger unit excited the writer's envy. He could not do otherwise than long for greater vision and stronger leadership in his own province. He felt that the children of rural Saskatchewan paid a heavy price in lessened educational opportunities because of the insistence of their parents on maintaining the small school unit. It would seem that our poverty and poor crops is not as big a factor as some would make out. The present war has shown that we can pay vastly bigger taxes when we consider the emergency great enough. When we get a proper perspective of the place that education should hold in the growth and development of children we shall be both willing and able to pay for a finer form of education.

FILMS FOR THE PEOPLE

The timely and well-conceived plan of the National Film Board to show films in the smaller communities of Canada is crowned with success as it finishes its first season this month.

43 circuits serving over 800 communities and a monthly audience of a quarter million people (63,000 in Quebec), is the achievement of a few months. And this great crowd, some of whom had never seen pictures before, have had the privilege of seeing programmes of the best films now being produced. Great credit should go to the Film Board and the co-operating bodies — the Canadian Council on Education for Citizenship and the Department of Public Information — which made this possible. At a recent meeting, plans were made to resume these showings on an even more extensive scale in the fall.

Only those who have had the privilege of reading the enthusiastic reports of these film meetings, sent in by local committees, can realize how general and how wholehearted the response has been.

"Some come by team 4 or 5 miles over heavy roads, against a cold February wind", wrote one secretary.

"Some people did not stay as the hall was so crowded they could not see", wrote another, reporting 500 present in a small village hall.

The children of ten and twelve country schools would converge on one village for the monthly showing of films. They wrote enthusiastically—

"I hope that the National Film Board will be able to continue sending us these pictures as we all enjoy them very much." . . .

"The film 'Tools of War' was timely and well-chosen. It succeeded in its purpose in showing us how far we are succeeding in catching up with the Germans in our race for armament." . . .

"'Heroes of the Atlantic' gave us a good idea of what the Canadian navy is doing to defend Canada. The one which I enjoyed most was 'Ottawa on the River', which showed some lovely scenes of Canada's capital." . . .

"I enjoyed the film 'H.M. Minelayer' because it showed more about this war, and how the mines were laid in order to sink enemy ships. Now I know why Geometry, is necessary. If the seamen didn't know anything about Geometry, they would have a hard time marking out their plans. It was amusing to know how the seamen enjoy themselves, and how quickly they are on deck when they are called." . . .

"I believe that these pictures are of great value to us. They give us an idea of the vastness of our country, and of industries and work being carried on in it. A great deal more information can be obtained by seeing these sorts of pictures and seeing the work actually being carried on, than by reading many books." . . .

The contribution of the films to understanding among Canadians cannot be measured. In some cases local committees, school boards, or Women's Institutes have planned the meetings wisely to get all from them that was possible for their communities: One secretary reports significantly "The chairman gave a welcome and talk to the French people explaining the project in French as well as in English. Each social and religious group in the community takes a turn in planning the meeting." . . .

Another: "Living in Quebec and having travelled very little, I find the pictures taken in other parts of the Dominion very educational. It is hard to realize that all this work is being carried on around us, until you have actually seen it performed."

KEEP AUGUST 14-15

for Camp Macdonald — The School for Adults

at Cedar Lodge

in preparation for the Community Schools

Plans are well under way for the second Camp Macdonald to follow the successful session held in August last year when so much was done to plan the big 1941 season of Community Schools.

This year the Cedar Lodge camp has been reserved for the full week of August 10-16 when the planning of the fall programme of schools and the training of workers will be carried on.

From August 10-14 two courses will be given to

selected leaders; one in Recreational Leadership and the second in Programme Planning.

The week-end of August 14-16 will be devoted to planning local schools and will be open to workers and friends of the schools.

The Annual Meeting of the Eastern Townships Adult Education Council will be held at Cedar Lodge on the evening of Saturday, August 11.

Further details will be announced in the next issue of the Journal.

Quebec Forums Meet

150 members of the Farm Forums of the Province spent June 8 in conference at the College, and were addressed by Dr. E. S. Archibald, Director of Dominion Experimental Farms. After a comprehensive review of Canadian agricultural conditions and the opportunities for increased agricultural production, Dr. Archibald urged: "We are at war, and it is up to us to consider what is the maximum that we on our various soils can do." Concluding, he pictured the inter-relation of agriculture and industry and the necessity for intelligent integration of both, and forecast: "There are terrible years to follow, unless the most thoughtful and well-prepared plan of our economic life is adopted."

At the business sessions the delegates completed the organization of the Farm Forum Council and decided to seek affiliation with the Canadian Federation of Agriculture.

Officers were elected as follows: Honorary President, Dr. W. H. Brittain; President, P. D. McArthur, Howick, Que.; Vice-President, William Frank, Kingsbury, Que.; Secretary-Treasurer, R. Alex Sim, Sherbrooke, Que.; Executive: T. Bennet, Bury, Que.; Geo. Collum, Ormstown, Que.; W. H. Day, Kazabazua, Que.; County representatives on the Council for 1942-43 are: A. H. Crutchfield, Huntingdon; Mrs. A. Henderson and Geo. Collum, Chateaugay; Wm. Frank, Richmond; Claude Witcher, Brome-Missisquoi; R. Connor, Stanstead; Mrs. C. Drummond, N. S. Cameron, and M. McElrea, Sherbrooke; J. A. Pollock, Argenteuil; M. K. Gibson, Gatineau; Gervais O'Reilly, Pontiac.

A. E. NOTES

Four successful County meetings of Farm Forums were held in advance of the provincial conference, on June 1, at Richmond, the Jersey Breeders and Farm Forum members held joint sessions. on June 2, Sherbrooke and Compton County Forums met in Lennoxville. on June 3, Stanstead County Forums met at Ayer's Cliff. and on June 4, Brome County Forums held their second meeting of the year at Knowlton.

J. A. Proulx of the Quebec Department of Agriculture, P. D. McArthur, Provincial Chairman of Farm Forums, Art and Elizabeth Haas and Alex Sim of the Adult Education Service, Elizabeth Hudson and Harry Avison of Macdonald College represented Quebec at the Winnipeg Conference of Farm Radio Forums, May 25-27.

Straight Ahead

"When the freedom-loving people march — when the farmers have an opportunity to buy land at reasonable prices and to sell the products of their land through their own organizations, when workers have the opportunity to form unions and bargain through them collectively, and when the children of all the people have an opportunity to attend schools which teach them truths of the real world in which they live — when these opportunities are open to everyone, then the world moves straight ahead."

—VICE-PRESIDENT WALLACE.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

THE TREND OF THE TIMES

All over the world thinking people are studying the problems which are arising and will continue to arise due to the changing position of women in the industrial world arising out of the war.

Among other problems is that of preserving a balance between household duties and war work. Housekeeping makes heavy demands on the time and strength of women, and with the addition of war work might easily result in the loss of physical health and well-being.

The other side of the picture is that women will be forced to keep more regular hours, take better general care of themselves in the matter of sleep and food, learn more about system in work, and budgeting in the home, and so measure up to their tasks.

Women are becoming more conscious of world conditions. This means that they will be better informed as to community conditions and the effect of these on national and international life. An improved mental and physical standard for all women means an advance in the way of life for every human being, since no nation can rise higher than its homes.

South African Women Study Future Place

"Calling All Women" was the theme of an organized effort by the women of Pretoria, South Africa, to study the part to be played by women in shaping the New World; it was treated in a series of thirteen talks by English and native women speakers in a conference called for the purpose. The talks stressed the great tasks which face men, women and children in the coming days, and the demands which the changing times are making upon every one.

Australian Women do Without Servants

War is a great leveller, and the expression, "Jack is as good as his master" finds its counterpart in the world of women to-day. In Australia every woman in the country is registered for war work, and no woman has servants, since all are on the same basis in war service. The registration is proving a permanent list from which workers can be selected at need. Every woman is doing some kind of war work according to her capacity or training, and is keeping herself in readiness to be moved instantly from one place to another should the need arise.

British Women Mobilized for War Services

Eleven millions of British women are now mobilized for active service under Government order in Britain. Ages include 20-37, married or single. All women not already doing useful work will in process of time be conscripted into the services or employed in industrial jobs.

Restrictions become More Stringent

There are few institutions in the home life of British women, from the attic to the cellar which are as yet untouched by restrictions. Among the latest is pyjamas. No pockets, no buttons, no elastic, no belts, and narrower legs is the rule in accordance with Board of Trade rulings, which bans every unnecessary article and limits others to the simplest and most primitive kinds.

There is a great shortage of crockery in England. Visitors to restaurants are asked to bring their own cups if they want tea or coffee served with meals. Silk stockings are among the most precious possessions.

Woman Representative to Customs Legation

One of the very few woman-career diplomats in the world is found in the person of Rosa Durland, Latin America's representative to the Cuban Legation in London. Senorita Durland is delighted with her new position, the duties of which she is sure she can accomplish as well as any man, and her record as a journalist and a loyal and patriotic citizen of her country justifies her confidence in herself.

Daintiness Still Distinguishes British Women

If any fears are entertained that Britain's women will lose their interest in their personal appearance, these fears may at once be set at rest. Seldom does a woman anywhere forget how she looks, and certainly British women are not included in the class that does forget. Frills and flounces may be officially banned in ready-made clothing, but there is as yet no law against home-made decorations.

Embroidered "undies" are not beyond the reach of the dainty-minded woman, as she can learn to make her own, using cotton where silk is not available. Old-fashioned hand-made lace is being revived and used in various ways.

The Board of Trade appears to have used discrimination in banning certain kinds of clothing trimmed with fur, silk, velvet or leather. Utility cloth has proved a pleasant surprise, to those who expected a coarse-grained, rather ugly material. Short skirts, seventeen inches from the floor save material; only six seams, one pocket, two box plaits, or four knife plaits, and no more than four buttons are allowed.

The effect of all this is noticeably a plainer and more tailored style, which is smart and yet practical for all occasions. Variations in material are being created by enterprising manufacturers.



“You and I

have a share in this War . . . right here on the farm.”

“THIS farm, like every other farm in Canada has a war job to do for the duration — Food For Victory. We, the women of Canada’s farms, are helping get it done. In these trying times, we can tell ourselves that the extra tasks we undertake . . . the extra hand we lend . . . will contribute directly to the Canadian War effort. We know that our labors will be lightened and our hearts made gladder by realizing that our additional labors are helping our menfolk bring Victory nearer and our boys home again.

“You and I have a war job to do right here on the farm—and *we can do it!*”

But over and above their regular farm work—farm women have gone “all out” to take part in direct war work. They have volunteered for work at home and in clubs. They have supplied huge shipments of quilts for British civilians, and hand-made socks and warm sweaters for our own boys in the Services. For the Canadian farm woman in her work on the home front of war...for her, too, the watchword is “Carry On.”

AGRICULTURAL SUPPLIES BOARD

Dominion Department of Agriculture, Ottawa

Honourable James G. Gardiner, Minister

There’s a War Job on every Canadian Farm

FOOD FOR VICTORY

The Garden of Good Will

At this period of the year when the subject of gardens is uppermost in the minds of many people, it is an inspiration to know that, lying on the approximate centre of the North American continent, located on the international boundary line between Canada and the United States, partly in Manitoba and partly in North Dakota, there lies a beautiful garden, known as the International Peace Garden, or, in more common parlance, the Garden of Good Neighbours,—a garden dedicated to everlasting peace between Canada and the United States of America.

At the entrance to the garden, a cairn of stones bears a plaque on which is this inscription.

"To God in His glory we dedicate this garden, and pledge ourselves that so long as men shall live we will not take up arms against one another."

Beginning of the Garden

The inception of the garden took place in 1929 in the mind of Henry J. Moore, a distinguished Canadian Horticulturist, a graduate of Royal Botanic Gardens, and the first Canadian to receive honours from the Royal Horticultural Society of Great Britain. Mr. Moore was travelling by train through Eastern Canada, enjoying the security of a country at peace with its neighbours, when the train stopped for a few moments just on the Great International Peace Bridge between Port Erie and Buffalo. The idea of a garden, half in Canada and half in the United States, flashed into his mind, the result setting an example to a war-threatened world.

Later, Mr. Moore broached the subject at a Convention of gardeners from the United States held in Toronto, and received the encouragement of a hearty endorsement. The Governments of both countries lent their patronage to the scheme, and Mr. Moore's dream of an international peace garden became a reality.

On July 14, 1936, a gathering of over 50,000 people witnessed the formal opening and dedicatory service, a

typical New World event as yet an impossibility in war-torn Europe.

The Garden of Good Will is a garden of the people. Although the Governments have given splendid support, much credit is due to the service organizations in both countries, which are generously helping to create a formal garden representative of all regions and climates in both countries.

Canada's Jam Quota this Year is 600,000 Pounds

Ontario Women's Institute members who last year in co-operation with the Red Cross Society were instrumental in forwarding 233,232 pounds of jam to Great Britain for the use of civilian war victims and Canadian troops in hospitals, are being asked to make 300,000 pounds of jam this year, states Miss Mary A. Clarke, Superintendent, Women's Institute Branch, Ont. Dept. of Agriculture, Toronto.

As in previous years, the Canadian Red Cross Society will provide the cans, labels and cases, and provide transportation to final destination. Sufficient sugar has been assured and Institute members in non-fruit growing areas will have an opportunity to supply funds for sugar.

One hundred and fifty tons of jam will bring a lot of sweetness into the lives of British bomb victims, mostly children and old people. Hundreds of letters have been received from grateful recipients including many from matrons of children's homes who state the jam sent last year has been a welcome and health-giving addition to the children's diet.

While the work in connection with the actual jam making will be done by W. I. members this does not mean that contributions of fruit, sugar or money will not be gratefully accepted by them from citizens in general.

The jam making objective for Canada as a whole has been set at 600,000 pounds.

Insist on Sugar Supplies for Home Preserving

Farm housewives who are having difficulty in getting their groceryman to provide them with their due amount of sugar for home preserving of fruits should insist on getting these supplies. Complaints are coming in to the consumer branch of the Wartime Prices and Trade Board that rural storekeepers are refusing to sell sugar to farmers for this purpose. They have no right to refuse to sell this sugar.

Here once more is the proper interpretation of the ruling respecting sale of sugar for the purposes of home preserving:

Any person may purchase such quantity of sugar as may be necessary for household preserving, canning or making jams and jellies of any fruit.

Such purchases are to be on the following basis: Half

a pound of sugar per pound of fruit, and in the case of jams and jellies, three-quarters of a pound of sugar for every pound of fruit. That sugar can be bought *in addition* to the regular family allowance of sugar for everyday use.

All home canning or preserving by the syrup method must be in a little light syrup — one part sugar to two parts water. All home made jams and jellies shall be done with three parts of sugar to four parts of fruit or juice.

Not only private households, but boarding houses and boarding schools, orphanages and other schools regularly serving meals, are included in the meaning of the word household under this order. That means that all these places are entitled to buy extra sugar for preserving purposes on the basis as quoted.

W.I. NOTES

by M. Elizabeth McCurdy

Dixville History Traced at W. I. Meeting

The subject of a paper given at Dixville Branch of the Women's Institute by Mrs. Thomas was the history of Dixville, and in her remarks the speaker traced the history of the place from its beginning in 1818 to the present time. An exhibit of heirlooms, some of them over a hundred years old, added to the interest in the meeting.

Scotstown Drive for Membership

Scotstown Branch is carrying on a drive for new members, as a means of introducing new ideas into the Branch. The importance of salvage was stressed, as well as the claims of the Annual School Fair. Substitutes for sugar were noted, and timely articles by well-known writers filled in an interesting programme.

Windsor Studies Banking

An informative talk on banking as it is of interest to women, by Mr. Caron, Manager of Windsor Branch of Commerce, the importance of training children and young people to understand matters of banking was stressed. An interesting discussion followed the formal talk.

Dr. McGreer at Ascot Branch

Dr. A. H. McGreer, Principal of Bishop's University, spoke at the Ascot Branch meeting on "Bible Study in the Schools." An invitation from Dr. McGreer to visit the Chapel of the University was received with enthusiastic thanks.

Mrs. A. E. Abercrombie spoke on "Foods as Home Defence," and answered questions on staple foods.

Ottawa Official Visits Aylmer East Branch

Miss Ransome of the Economics Section of the Department of Agriculture, Ottawa, gave an interesting description of work done in the Experimental Kitchen in trying out new varieties of vegetables and other foods. Representatives from the Branch attended the mass meeting held by the War Time Prices Board in Ottawa.

Home Economics

New Carlisle and South Bolton heard an address on food conserving. Lennoxville studied price ceiling, each member being provided with a small note book in which to enter current prices. In Eardley Branch a paper entitled "My World" was given by Mrs. Wm. Dow. Wakefield held a special discussion on ways of saving sugar. Miss Pearl McConnery addressed Wright Branch on ways of conserving, and Shawville had an address by Miss Fairbairn of Shawville High School. Wyman began a series of studies on nutrition.

Red Cross and War Work

Elmside Branch had a paper on the new Alaskan Highway.

Co-operation between the English and French women of Rawdon is a feature of the work there. Excellent results have been obtained by the Branch, both locally and

in the wider areas of war needs. Miss Lucy Daly is a moving spirit in all efforts and keeps herself and her Branch informed on all of the live issues of her task. Belvidere Branch reports a total of 34 knitted and 35 sewn articles, and Orford 21 knitted. Milby Branch raised \$8.00 in aid of Red Cross, and continues to work during the meetings on Red Cross Supplies. Lennoxville is continuing work on V Bundles for Britain, and has sent 323 articles and 19 quilts to headquarters in Montreal. Brompton reports 29 sewn articles, including 5 quilts, 1 knitted afghan, \$4.00 worth of War Stamps sold, and \$7.00 raised in donations. Warden sent 20 Easter parcels to local boys overseas. Eardley has a record of 43 sewn and 12 knitted articles, and Wakefield 2 quilts. All Branches in Pontiac are sponsoring salvage collections. The proceeds of a food sale at Fort Coulonge was donated to the needs of the Navy League. Leather coats for Norwegian sailors were made in Elmside Branch.

CBC TALKS ON KITCHEN HERBS

Elizabeth D. Long, CBC Women's Interests, is asking for co-operation of Quebec Women's Institutes during the coming summer and fall in the culture, harvesting and cooking of garden herbs.

To aid the home cook in making full use of these herbs, the CBC will present seasonal talks this summer and autumn on how you may raise herbs in your own garden, and use them in your own kitchen.

The speaker will be Eustella Burke Langdon, Canadian herb authority, who also has compiled a CBC Herb Chart, giving detailed information on these subjects.

Her radio talks will be heard over the CBC National network Monday afternoons at 4.03 o'clock as follows:

- June 22 How to Use Fresh Herbs.
- June 29 Fresh Herbs in Salads.
- July 6 How to Harvest Herbs.
- July 13 Herb Jellies.
- Sept. 21 How to Harvest Late Herbs.
- Sept. 28 Bringing Your Herb Garden Indoors.
- Nov. 23 Cooking with Dried Herbs.
- Nov. 30 Cooking with Savory Seeds.
- Dec. 7 Herbs for Bazaars.
- Déc. 14 Herbs for Christmas Gifts.

Ambitious Young Canadian Woman Lands Unique Job

The Winnipeg Grain Exchange for over fifty-five years has never allowed a woman Messenger on the trading floor. This record has lately been broken by the appointment of Bernice Clark of Winnipeg as Messenger.

This eighteen year old girl follows Harry Dickenson, R.C.A.F., in the job. Her duties include carrying, buying and selling orders to her firm's representatives in the pit, and in rushing newly quoted prices from the floor to the wire room for transmission to various offices.

PARENTS AND CHILDREN

by Mary Avison

This column will welcome comments or questions on the problems it deals with, or on others that arise in every normal home.

"Taking the Baby With You"

To-night as I arrived at the station my taxi driver told me it was very risky to take so young a baby travelling. "We never took our baby out of his own house and yard till he was more than a year old", he said seriously. I had no time to ask him of the effect this had when the child was finally taken out visiting nor whether his son had been particularly frail and delicate. But I looked at my healthy, sturdy, friendly youngster and thought:—'With care, some precautions and moderate luck there is little danger and perhaps much gain from accustoming a child early to accept changes of scene, to be undisturbed by strange surroundings and to meet the appearance of new faces and new voices undismayed.' . . .

Summer is the time for visiting, especially in our country where winter travel is more difficult. It may mean holiday journeys or camp outings, a day at the neighbour's or a week with granddad. By most children such visits are eagerly anticipated and keenly enjoyed. Even the small baby can be happily included and both give joy and receive good if such outings are carefully planned.

Where over-fatigue and illness result, where fearfulness and shyness are shown, where irritability and querulousness spoil a visit, the cause can usually be found in lack of foresight on the part of the adults, lack of understanding and lack of precautions taken in advance.

Here are a few suggestions: (1) Whether the visit be for a few hours or for several days, make plans far enough in advance to allow time to be ready without that last minute rush which taxes everybody's nerves.

(2) Take along enough (of clothes, baby things, coats and rain capes, etc.) to provide for emergencies—but not so much that everyone is overburdened.

(3) Include a toy or two for each child — preferably small ones easily packed, of the activity variety—or something new to keep them occupied while you "visit". A gift for the children where you visit need not be expensive if it is suitable to their age and new to their experience. It may provide an easy introduction for two children who feel strange at first but can forget themselves in a common interest.

(4) Don't let the outing, visit, or trip interrupt the child's regular routine more than is absolutely necessary to fit in with train schedules. Especially for the younger children meals, naps, bed time are important to both health and poise and it is only as they get older that we should expect them to accept some upset of routine with equanimity. Then perhaps, it is welcomed with delight and provides part of the treat. But late hours and adult

food mean only upsets, fatigue and irritability for little ones.

(5) The "familiar" is important to a young child; especially in strange surroundings which may be disconcerting or even terrifying, the "familiar" has a steadying effect and gives a feeling of security, an anchor to hold on to, in a strange sea. Such apparently insignificant things as his own cup and spoon, his special blanket or baby pillow, may make all the difference to his feeling "at home" in a new setting, during meals, or at bed time.

One two-year-old could not get to sleep at rest time on the train because there was no blanket on a hot day. Oddly enough a large handkerchief supplied the needed feeling of familiar covering and she dropped off almost as soon as this was spread on her knees! Mothers who are observant will know what their children count on to make up the familiar pattern of their lives whether it be some small physical treasure or the daily repeated lullaby or joke or the familiar pat to the pillow.

(6) However, the 'familiar' can not make up the whole of life. It is necessary as the background, the thing we count on for our basic security. But the *new* adds zest and interest to living, especially if we are sufficiently prepared to feel adequate when we meet it. This is true of young and old. Therefore a certain amount of judicious preparation for "what it will be like" and "what we will do" on our journey or visit is probably helpful. Whet the appetite without over exciting the child or building apprehension. If he must "shake hands nicely" or "say 'thank you' to the lady" don't wait till the visit to teach him. Make a game of it ahead of time—a dramatic play and let him try out *both* parts till he is at ease in either one. Then you won't be as likely to have him embarrass you and himself by sudden shy refusal to say anything.

Tell him what he will see, whom he will meet; let him, if possible, learn something about the new experience he will have (of trains and boats, of farm animals or city streets, of the nearby airport or the fish in the lake) so that he will have something to contribute when the other children begin to display their knowledge.

(7) Lastly, do it all, as far as possible, as a family project. It is surprising how early a child can help and enjoy helping in the preparations, the chores necessary to getting ready — and it is amazing how much this sharing adds to the enjoyment of the holiday.

Pleasant outings, joyful days and happy memories — to you all —



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MONTREAL

Butter Shortage May Continue

There is a butter shortage across Canada according to W. J. Bird, Nova Scotia dairy superintendent. On April 1, 1940, butter stored in Canada totalled 22,600,000 lbs. On May 1, 1941, the total had dropped to 10,171,000 lbs., and on May 1, 1942, it had gone down to 6,500,000 lbs. Hand in hand with the storage decline there has been less butter manufactured. In April 1941 the total make was 19,000,000 lbs., while in April 1942 it was 17,000,000 lbs. While storage and make have decreased, consumption has grown. In April 1941, 20,000,000 lbs. of butter went into distribution in Canada while in April 1942 the total was 21,576,000 lbs. Normally, there is an increase in butter production when the cows go out to pasture. Production increases during the summer months and storage climbs till October. This summer, however, with storage down and the demand for dairy products abnormally high there may be keen competition between storage and consumption if the make continues low.

C.S.G.A. Annual Meeting

Programs have been arranged for the annual meeting of the Canadian Seed Growers' Association which will be held in the Provincial School of Agriculture, Olds, Alberta, on June 16th and 17th. Preliminary meetings will be held by the Board of Directors at 10 a.m. and 2 p.m. 15th June, followed by a meeting of the Alberta Branch of the Association at 2 p.m. J. R. Sweeney, Deputy Minister of Agriculture, Alberta, and A. A. Dunkley, Mayor of the Town of Olds, will give addresses of welcome on the opening day.

A program for the ladies has also been arranged, including visits to the Handicraft Room, talk and demonstration on the use of honey, motor trip, and banquet. Recreation facilities will be available on the lawn bowling and croquet greens and tennis courts of the School grounds, as well as use of the Olds golf course.

No. 26

MIRACLE BILL SAYS



Right now I've got a flock of pullets I hatched early this year. They're just beginning to lay. I'm out to bust some records with those birds, because I'm feeding 'em Ogilvie "Miracle" Laying Mash. Most folks think it's expensive stuff to feed to pullets . . . but I know better. Last year I tried it, and figured the cost. Sure . . . it did cost me a cent and a half more per month for each hen . . . compared to other feeds. But . . . I got an average of three more eggs per hen each month. And, what's more, they kept on laying like that long after my neighbours' hens slowed up. So you see it was actually cheaper. That was with the regular Ogilvie "Miracle" Laying Mash. This year I'm using "Miracle" Laying Mash Concentrate, with my own grain and grits. It's a little more trouble, but I'm not so busy right now, and I want to see if I can

make a better
record at less
cost . . .



MAKE IT
PAY

THE "MIRACLE" WAY

The OGILVIE FLOUR MILLS Company, Limited

42-16

When a Horse Nods It Doesn't Mean O.K.

Horsemanship, which included the care and management of horses in its original meaning, is a lost art on many farms and industrial undertakings in Canada, but the topsyturvydom of war indicates that a general return to the knowledge of horses may be of great importance. When a normally quiet work horse suddenly becomes unmanageable, it may not be a matter of temper but terror through the savage impact attack of a nose bot fly. Also when a horse keeps moving his head up and down, again it may not be approval of his job. The experienced horseman knows at once he should look for infestation by the throat bot fly. The third species of bot fly, and the largest of the three, known just as the horse bot fly, is more diplomatic in his approach, and lays her eggs on the hairs of the forelegs, or shoulders, or mane.

All three species of bot flies—some-what resembling bumble bees but each distinguishable from the other—not only cause serious annoyance to the horses, but through their egg-laying capacity, create very great injury, resulting in malnutrition, stomach inflammation, ulcers, colic, and other digestive troubles, and even death. The bot fly season in the warm summer days will soon be here. Control measures are explained in the Wartime Production Series special pamphlet No. 16, entitled "Control of Horse Bots". General information on health precautions and diseases of farm animals is given in the special pamphlet No. 38. Other specific knowledge on the care of horses is contained in Circular No. 656 on the feeding of horses, and in Circular 607, Parasites of horses. These publications may be obtained free by writing to the Publicity and Extension Division, Dominion Department of Agriculture, Ottawa.

With the exception of poorly cared for milking machines, there is probably no other utensil which may add so many bacteria to milk as the shipping can.



CAPTAIN IN CANADA'S LAND ARMY

● Producing food for our fighting men and for busy war workers in Canada and other free countries, is a war job of the first importance. Canada's land army of skilled farmers is hastening victory by keeping food-stuffs rolling.

LOANS TO FARMERS . . . Do you need cash to gear your farm to peak war production? Your enquiries are invited and will be carefully considered by your local branch Manager.

The Royal Bank of Canada

Cord of Fuel-Wood

It is estimated that ten million standard cords of fuel-wood are cut each year in Canada. It is an important product of the average farm woodlot. The Weights and Measures Act defines a standard cord as a stack containing 128 cubic feet—a pile 8 by 4 by 4 feet. A "short" cord, or "stove" or "face" cord contains less wood than a standard cord. It is not a cord, but a tier of wood 8 feet wide and 4 feet high made up of wood that is less than 4 feet, usually 12 to 16 inches long.

White clover is essentially a pasture plant. No other legume is so widely used in pasture mixtures throughout the temperate zone. In Canada, white clover grows abundantly under both wild and cultivated conditions throughout Ontario, Quebec, and the Maritime Provinces.

Pasture constitutes about 41 per cent of the 29,625,137 acres of land devoted to growing field crops in Eastern Canada.

STRIPPINGS

by Gordon W. Geddes

Would-be cattle buyers are always springing some new idea. The latest was most surprising of all. One man's sole reason for not buying was that the heifers' udders were too big. With such a development at two years he was afraid they couldn't carry them around when they got to be cows, especially if the dog got chasing them. He did admit that the dog shouldn't be chasing them but still insisted they were too good cattle for him. Oh well, some Jersey man who doesn't object to a Holstein udder will buy them. If not, they'll still give a lot of milk.

Speaking of milk, the dairy committee came out with a pretty weak solution of the dairy production. They used the easy but inefficient method of a low price for butter to get more cheese. Now there'll be too much clamour for cheese equipment which will be left to rust a little later on when we have a butter shortage. They should have put districts suited to cheese into that business and left enough creameries to furnish the needed butter. Perhaps there were too many milk shippers in the farm representation on the committee.

The Jersey men certainly got action in their effort to increase fat production in Quebec by offering free bull calves. Seven hundred are already ordered and more are coming in. Now Ontario is to help furnish the bulls. It's too bad the English farmers couldn't have had a chance at the calves, too, but it shows that the French do recognize opportunity when she knocks.

Our first experience with a rubber-tired tractor strengthened our previous belief that steel wheels had more traction. This one couldn't go at all where the old steel wheels would whiz right along. Either the harrow was too big for the tractor to handle under conditions met in custom work or steel wheels are the best. The rubber tires are handy between jobs but it's not good practice to sacrifice efficiency on the job for convenience in between. Of course steel wheels will be on the new tractors for a time anyway.

The E. T. Boards of Trade started in the right direction when they passed a resolution asking the Quebec Forestry Department to look into the possibilities of reforestation in the district. Perhaps hearing of the land-use committees in the States at the International Adult School caused A. M. Irvine, mover of the resolution, to thinking along those lines even before the Forestry Engineer spoke at the Association's annual meeting. We can agree with the latter's remarks on the dangers of deforestation but we didn't know Quebec was quite so badly off in that respect. He said forty per cent of a watershed should be in forest while some sections of the province had dropped to only twenty. At the same time forest conservation doesn't mean leaving good timber standing to rot away. It means cutting timber in its prime and keeping young growth coming on to perpetuate the stand. Too many old trees left will crowd out the young stuff. Then they all mature at once and nothing is left. It's like a country populated entirely with old people if you can imagine such a one. Such a population would steadily decrease.

The same thing is going to happen to the farm population for the average age of farmers in some districts is getting pretty high. They still turned out a lot of food in 1941 but they can't do it indefinitely without some young blood. Still, after the war farm help will be as plentiful as it is scarce at present.

The early spring was a god-send to those who were short of hay. Pastures look well and the hay is off to a good start. Perhaps it will be more plentiful next winter. If so and it is harvested in good condition it can help to alleviate the expected shortage of feed grain. Animals eating roughage can do wonders on plenty of good quality fodder even if the grain ration is light. Early spring means early asparagus if you have a bed of it (and you should). It's ready just when the vegetable supply is getting low and how it does grow! Cut it one day and there's more the next.

No. 29

MIRACLE BILL SAYS



When I was a kid, I used to hang around the county fair a lot. They had horse racing, and while I'm not a betting man, I did like to see them run. One of my neighbours had a horse he was always putting in the races, but that nag never won once. She would go lickety split—way out ahead of the whole kiboodle—until she hit the stretch. Then she'd just slow down and lose . . . Now, what made me remember that is that I was thinking that the last month before a hog is marketed is like the home stretch in a race. It ought to be the best spurt. If you let down feeding hogs the best feed in that stretch, you lose. When that time comes, there's nothing like **Ogilvie "Miracle" Hog Fattener** to keep up the hog's speed in getting into prime condition. My hogs beat my neighbours' sometimes as much as a month in getting to market, but that's because I feed 'em **Ogilvie "Miracle" Hog Fattener** in the home stretch.



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THE COLLEGE PAGE

News of the College — Staff, Students, Graduates

DEAN'S LETTER TO ALUMNI

DEAR GRADUATE:

For several years we have sent to all of our agricultural graduates a letter giving news and notes regarding the College, the staff and the students. In view of the regrettable lack of a strong and active Alumni Association, this has fulfilled one of the functions ordinarily taken care of by such an Association. The scores of letters that we have received from our alumni indicate very clearly that at least they do retain a lively interest in the College and its work. This year, instead of the regular circular letter, we are using the columns of the Journal to get in touch with our graduates, since a very large proportion of our graduates are already subscribers.

Enrolment

During the past year an expected decrease took place in the upper years in agriculture due to enlistments in the armed forces. There also was a heavy enlistment of rural boys throughout our constituency, as well as a drift into various war industries. This resulted in a further depletion of our Diploma Course. These losses were more than compensated for numerically by an unexpectedly heavy enrolment in the first years of the degree courses. We do not know what next year will bring, but may look forward to a further good enrolment of young men below military age, with further depletion through enlistment in the upper years. The School of Household Science maintains a steady growth.

Research and Investigational Activities

An active research programme has been maintained and extended during the year. The outstanding development in this field has been the establishment of a new graduate department of Animal Nutrition in the University, with Dr. E. W. Crampton as Chairman. Associated with him in the new Department are Dr. David L. Thompson, Professor of Biochemistry, and Miss Margaret McCready, Director of the School of Household Science. The close co-operation of this Department with Dr. W. D. McFarlane and his staff in the Department of Chemistry, has resulted in a very active programme in the general field of nutrition. All our research committees have had an active year, various individual projects have been continued or extended, and our registration in the various graduate departments has been fully maintained.

The Journal

This new venture in agricultural journalism has now passed its first year, and we can fairly claim at least a modest success. The subscription list has grown rapidly, and a large proportion — in fact a great majority of farm families in the rural parts of Quebec are now numbered among the subscribers. Arrangements have lately been completed for supplying it to the some two thousand members of the Women's Institutes of Quebec, while subscriptions from other provinces are fast coming in.

A rural Journal of this type, edited and published entirely by a college staff, is something new in this field, and supplies us with a useful medium for spreading the message that we have to deliver. A steady improvement in the quality and general usefulness of the articles printed has been achieved, and further progress is confidently expected.

Extension Activities

Our extension activities have centered around the formation and operation of rural study groups throughout the province. The activities of many of these groups have centered around the Farm Radio Forum. A very enthusiastic Listening Group Leaders' Conference was held in November, which laid the basis for our later work. Seven Community Schools were held. Various regional weekend conferences were also organized for the study and planning of regional programmes, and all this activity resulted in a record performance for our listening groups, both in numbers and activity. At the present time, two film circuits are being taken care of on behalf of the National Film Board. Through all these different agencies, a very large number of people have been reached by our programmes. These include 1,000 members of Community Schools, 7,000 people reached each month in our film circuits, and 2,000 members of Farm Forums.

The C.W.A.C. Training Centre

With the New Year came the announcement that the C.W.A.C. were taking over our Women's Residence, and this move has resulted in profound changes in our student life. Most spectacular of these was the temporary moving of the School for Teachers in to Strathcona Hall, the moving of the women students into the former Men's Residence, and the preparation of quarters in the Main Building and certain former staff residences for the men students. The fitting up of the kitchen and dining room to take care of the increased population, involving the changing over to a cafeteria system was another development. All these changes were carried out with great dispatch and with a minimum of disturbance to academic

life. The students are to be commended for the splendid way they co-operated in making the desired changes and in putting up with the temporary inconveniences caused. It is pleasing to record that the new arrangements have proved very satisfactory to all concerned. It is generally agreed that the new dining room arrangements are an improvement, and even the residence changes are not without many good points. The college has been pleased to offer its facilities to the government for this important work, which it has been able to do without impairment to our other functions in any way whatever.

Student Activities

In spite of all the added distractions and military training, all student activities have been carried on. The need for some reconsideration of this problem in view of the present situation has, however, been realized, and a joint committee has given attention to the question, not only of reducing the number of activities, but, what is more important and constructive, arranging for a better integration of existing activities with a view to the improvement of student life generally.

Macdonald Students and the War

Since the outbreak of the war an imposing number of graduates, former students and staff have entered the armed forces, and already it has been our painful duty to record the loss of those who have given their lives in this struggle. Pilot Officer Donald Cameron met his death fighting over Malta. Sub-Lieutenant Kenneth Hew Smith (Diploma '38), R.N.V.R. (Fleet Air Arm) mentioned in despatches "for conspicuous bravery in the Battle of Metapan" where he torpedoed an Italian cruiser, "failed to return" from an operational flight. Pilot Officer Donald C. Dougall (Agr. '38) received the D.F.C. for what his Commanding Officer described as "one of the bravest things ever done by a member of this squadron". He is now a prisoner of war in Germany. Many of our present students will join the forces following the close of the present session, and still others will be joining up as they attain military age. A goodly number of our women graduates are serving as dietitians, or in one or the other of the auxiliary services. Others, staff and students, are doing important war work. Many projects in connection with the war effort are being vigorously prosecuted at the College.

Conclusion

With all the changes the war has brought, the College will still be in full operation next session. It is expected that we will again have at least a few registrations of young men below military age in the first year. The value of having such men at least make a start at their college course is generally recognized. The acceleration of courses which has gone into effect in other faculties of the University has not been extended to agriculture or household science.

We will be grateful to our graduates for the names

of prospective men or women students to whom we may send literature. We will be more than grateful if you will send us news of yourself for inclusion in the columns of the Journal, as such news is always of interest to our readers who are former students. We will be particularly grateful for the names and addresses of those serving in the armed forces, for which we desire to maintain a complete file, and we are sending you each a list which we desire to have you check for corrections and additions.

With all good wishes, I am,

Yours faithfully,

W. H. Brittain

Vice-Principal

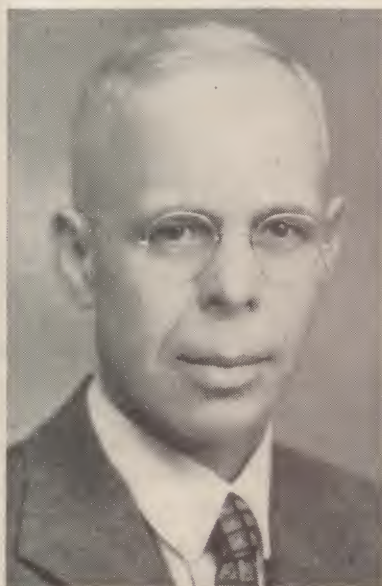
It is with deep regret that we announce the death on June 1 of Dr. H. D. Brunt, since 1919 Professor of English at Macdonald College.

THE MACDONALD CLAN

Notes and news of graduates and former students.

DR. ROBERT NEWTON,

B.S.A., McGill, 1912; M.Sc., Minnesota, 1921; Ph.D., Minnesota, 1923; D.Sc., Alberta, 1933; F.R.S.C., 1930.



Dr. Newton, an outstanding Macdonald graduate and leader in Canadian agriculture, is a native of Montreal. He spent his early boyhood on a farm at Plaisance, Quebec. He had a distinguished undergraduate record and upon graduation acted as District Representative of Macdonald College at Shawville. From 1913 to 1914 he was chief assistant

cerealist, Dominion Experimental Farms, and from 1914 to 1915 he was director of agricultural instruction in New Brunswick. In 1915 he joined the Canadian Field Artillery, was wounded in France in 1916, and was awarded the Military Cross in 1917; in 1919 he was demobilized with the rank of captain. After the war he became Assistant Professor of Field Husbandry at the University of Alberta; one year later he was awarded the Shevlin Research Fellowship and undertook post-graduate studies in plant biochemistry at the University of Minnesota. Like his under-

graduate career at Macdonald his period of post-graduate study was distinguished; he received his M.Sc. in 1921 and his Ph.D. in 1923. He returned to Alberta to become Professor of Plant Biochemistry in the Department of Field Crops and in 1924 was promoted to head the department. In 1928 he became Director, Division of Biology and Agriculture, National Research Council, Ottawa, through which position he wielded a strong influence on agricultural research throughout the Dominion and was directly responsible for many advances in varied fields of endeavour.

On May 1, 1940, Dr. Newton left the National Research Council to replace the late Dean Howes as Dean of Agriculture at Alberta. His remarkable success as an educator as well as a director of research is well attested by his appointment as Acting President of the University of Alberta on September 1st, 1941, followed by his appointment as President which was announced last month.

Dr. Newton's career as a natural and outstanding leader is one of which Macdonald, his *alma mater*, is justly proud. His work on the nature of frost resistance and disease resistance in plants, quality of wheat in relation to variety, soil and climate, etc. is well known. As Chairman of the Associate Committees on Grain Research, on Field Crop Diseases, on Parasitology, and the National Committee on Weeds, Dr. Newton still finds time in an extremely busy life to give many professional agriculturists direct benefit of his rare judgement and understanding of our country's needs.

Dr. Newton is one of a family of agricultural scientists. Dr. Margaret Newton, Senior Plant Pathologist at the Dominion Rust Laboratory, Winnipeg, is well known for her outstanding studies on black stem rust of wheat. She was recently elected a Fellow of the Royal Society of Canada, thus being one of the first ladies to be accorded this honour. Dr. William (Bill) Newton, Officer in Charge of the Dominion Laboratory of Plant Pathology at Saanichton, B.C., has been of inestimable assistance to the bulb, fruit and hop growers of British Columbia, and is in no small way responsible for the success of the methods employed by the loganberry wine industry of that province. Dr. J. D. (Jack) Newton, Professor of Soils, University of Alberta, is well known for his soil surveys in the prairies. His researches in soil treatment in Alberta are internationally known, and as a lecturer he has retained a great popularity with his students. Dr. Dorothy E. Newton (now Mrs. W. E. Swales) was Lecturer in Botany at the University of Manitoba and later at Macdonald College. Her work on the pasture studies in connection with the Soil Survey of Quebec has received wide recognition.

All the Newtons are graduates of Macdonald College.

Roses for Dinner

In our January issue there appeared an article on the use of rose hips for making jams and jellies which are particularly rich in Vitamin C. This article outlined the work that was being done at Macdonald College along this line and described the methods of making the jams.

A letter received from Mr. G. H. Hamilton, botanist for the Niagara Parks Commission, gives us an interesting picture of similar work being done at the Commission's School for Apprentice Gardeners under the direction of the Headmaster, Mr. K. M. Broman.

A large rose garden is under construction and for the past four years a great many varieties of roses have been collected and propagated. Among them were a number of cultivated varieties of *Rosa rugosa* which bear exceptionally large hips. The students collected hips from the roses and after they had been cleaned and picked over they were prepared for table use by the school chef. For the benefit of any of our readers who are interested in trying this food, recipes for the dishes which proved most popular are given below.

ROSE-HIP PUREE (for 6)

1 pint of Rose-hips	1-1½ cups sugar
5 pints of water	1½ tbsps. starch
1 oz. chopped almonds.	

Wash and clean selected rose-hips and place in cold water. Boil until soft, stirring frequently. When quite soft, strain through a sieve. Add sugar; then the starch which has previously been mixed with a little cold water. Place on stove and boil until the desired consistency and flavour is attained. Just before serving, add the roasted almonds chopped up fine.

ROSE HIP CUSTARD (for 6)

¾ pint of Rose-hips	1-1½ cups sugar
3-3½ pints of water	1 piece stick cinnamon
3-4 tbsps. starch	

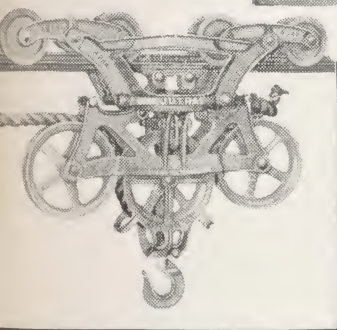
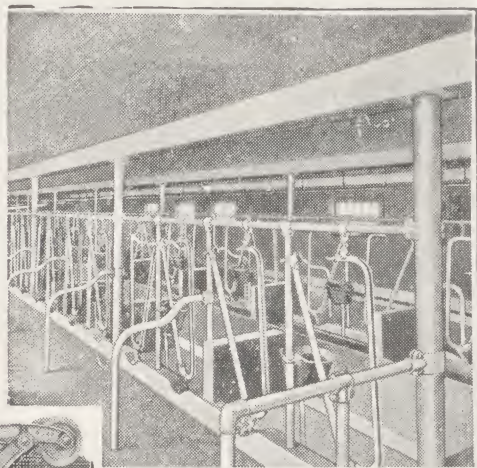
Clean rose-hips, place in water and boil slowly, stirring to get full flavour. Strain and add sugar and cinnamon, then allow to boil slowly. This boiling will cause the formation of some scum which should be carefully removed. Add starch treated as in previous recipe and let boil for a short time. Pour into moulds and when cold, serve with whipped cream.

There are many waste spaces about the home and roadways where roses could be planted to serve a double purpose — beautifying the countryside and providing hips for making preserves and jellies. *Rugosa* roses are extremely hardy and have very attractive foliage and blooms. The hips are produced after the blossoms die, and those gathered just before the first frost make the best jams.



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